FACTORS FOR EVALUATING THE NEED FOR BRIDGE AND APPROACH RAIL

The following is a list of factors for use in evaluating the need for bridge and approach rail on Fish and Wildlife Service bridges. These factors will assist with evaluating the probability of an accident occurring, as well as the probable severity of an accident if one occurs.

A. Historical data, including accident history at the site.
B. Vehicle speeds approaching and across the bridge.
C. Traffic volume.
D. 1-way versus 2-way traffic.
E. Number of traffic lanes.
F. Type of vehicles using the bridge and amount of use, such as trucks, etc.
G. Bridge surface (i.e. slippery vs. non-slippery).
H. Approach roadway alignment.
I. Approach roadway width vs. bridge width.
J. Approach roadway surface.
K. Approach site distance and site distance across the bridge.
L. Approach roadway embankment steepness.
M. Bridge features, such as width, length, and deck cross-section (flat vs. crown).
N. Weather and other environmental conditions such as snow and ice on the road, visibility problems such as severe fog, and condition of the roadway during rain.
O. Nighttime use.
P. Familiarity of users with the bridge.
Q. Probable severity of injury from a bridge run-off due to bridge height, depth of water, vehicle speed, etc.
R. Operational concerns of the facility.
S. Aesthetic concerns.
T. Pedestrian use.
U. Projected future use of the bridge.